5

ABSTRACT OF THE DISCLOSURE

A signal traffic routing method for a signaling network, for example, a No. 7 signaling network, includes analyzing a signal message when a message transfer unit receives a signal message and determining a route of a final destination of the received signal message, selecting a link for transferring a signal message at a link set of the thusly determined route based on a link determination history and link determination data, updating the link determination history and link determination data based on the selected link, and transferring a signal message through the selected link, thereby enhancing an availability and performance of the signaling network by distributing a signal traffic to all available link of a link set. The message transfer unit preferably comprises a message discrimination unit, a message distribution unit and a message routing unit—that distributes a signal traffic to an available route at each signal transfer point.